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(56) Documents cited
GB 2224720 A **US 4340141 A** **US 3743084 A**

(58) Field of search
 UK CL (Edition K) **B8P PA PK10**
 INT CL⁵ **B65D**

(54) **Blister packaging**

(57) A blister packaging arrangement, particularly for pharmaceutical products, wherein each dosage is recognisable by feel as well as sight, comprises first and second separate rectangular areas 11, 12 of a support member 10, each having blisters 17, 17' formed thereon, a third rectangular area 13 of the support member 10 being located between the first and second areas 11, 12, with respective fold lines 14 therebetween. The blisters 17, 17' formed on the first area 11 are offset with respect to the blisters formed on the second area 12, and the width of the third area 13 is such that when the first area 11 is folded about the fold lines 14 to overlie the second area 12 the sides of the blisters 17, 17' removably interengage one another. Two such arrangements may have a common support member 10, joined by a fourth area 15, allowing the two arrangements to be folded one on another.

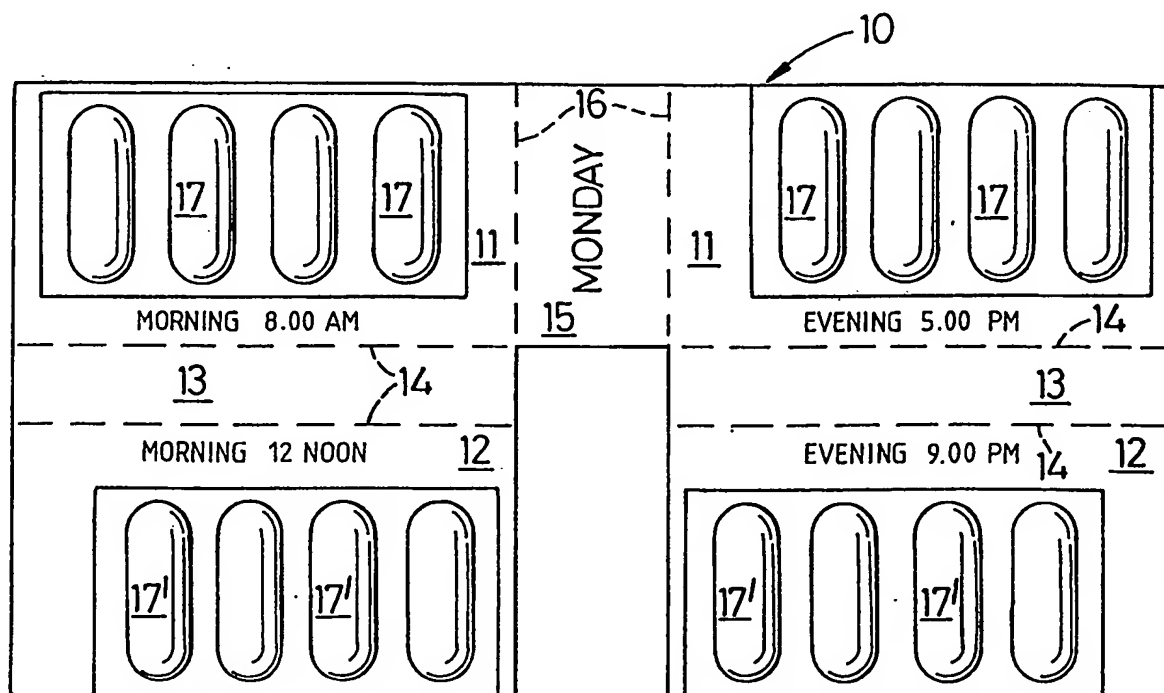


Fig. 1

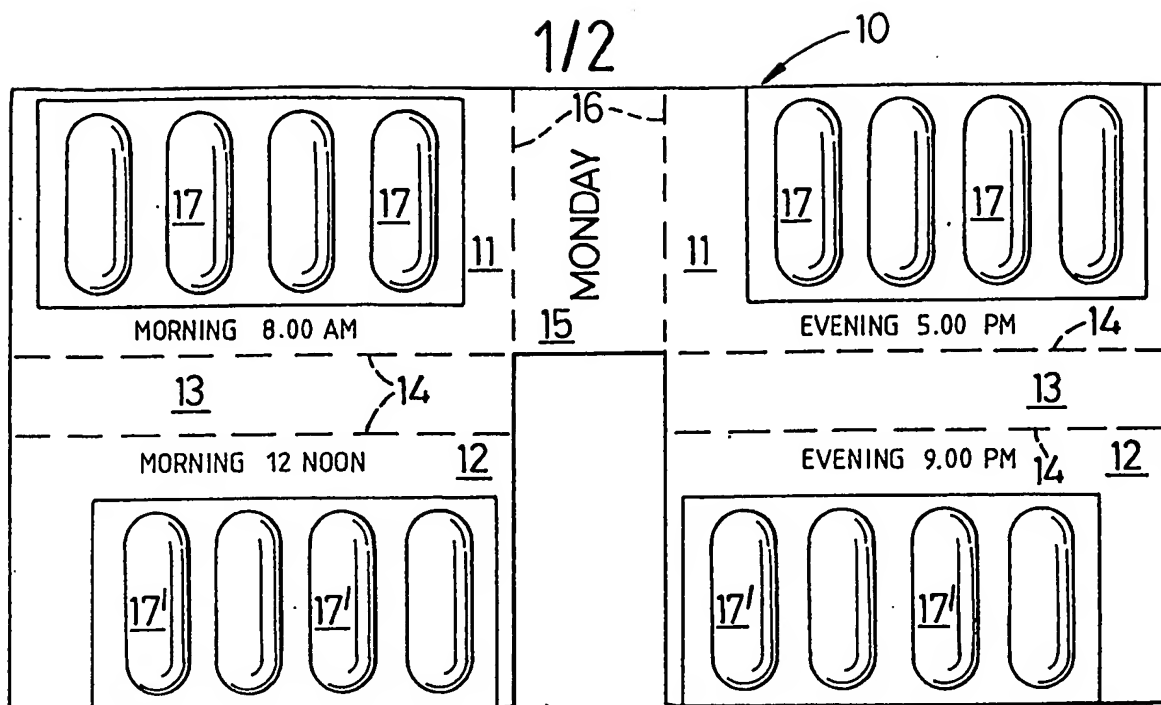


Fig. 1

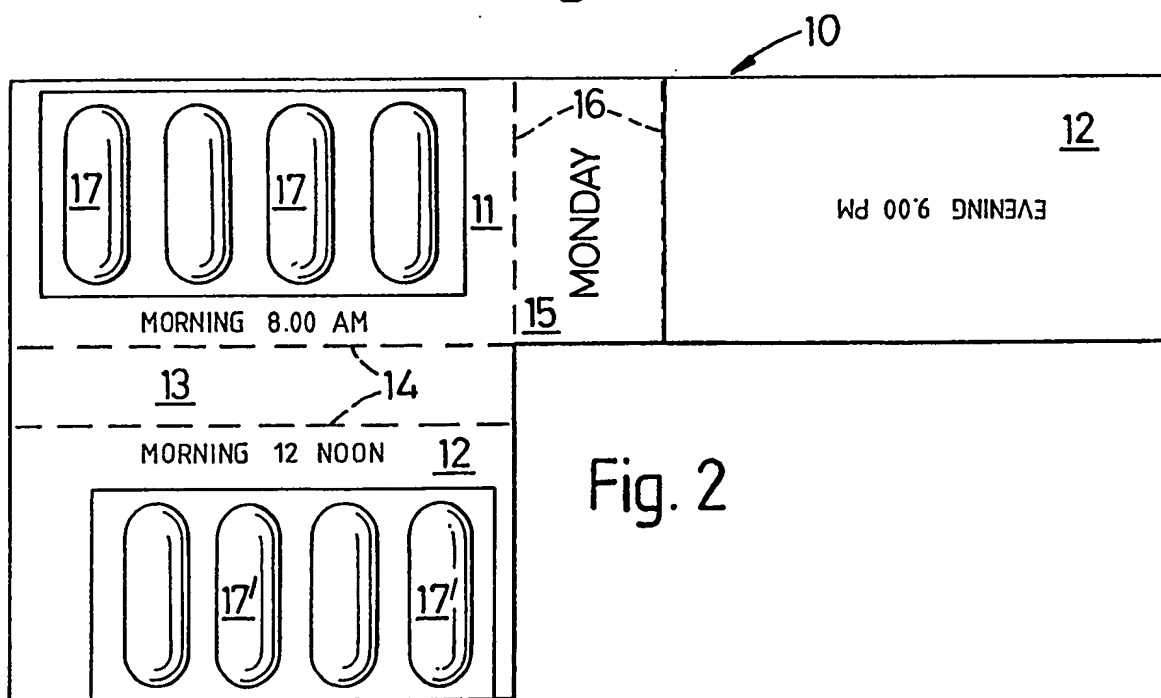


Fig. 2

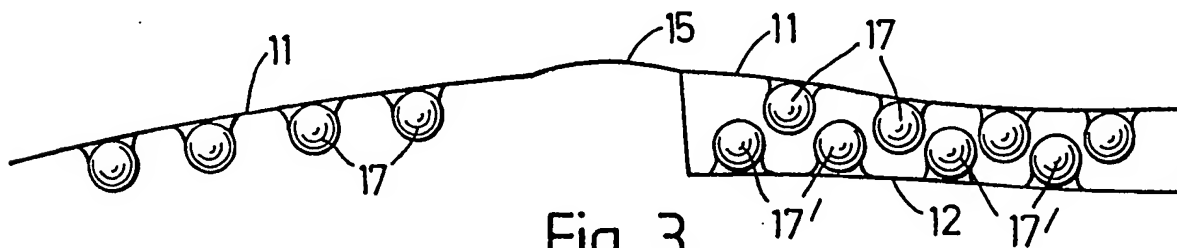


Fig. 3

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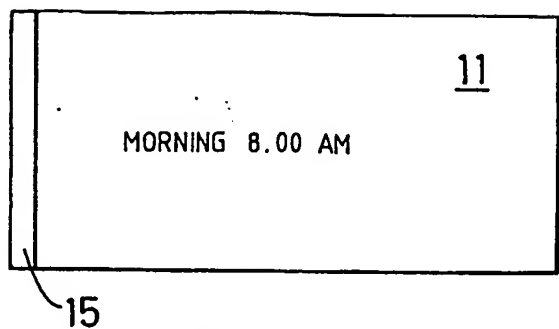


Fig. 4

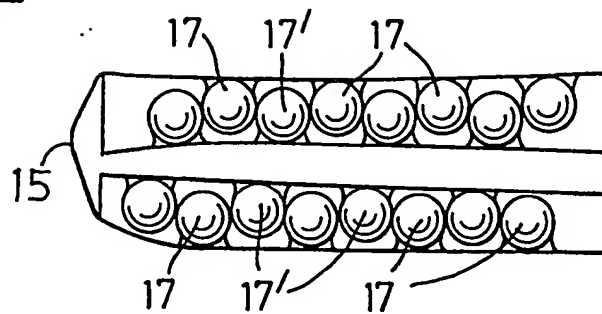


Fig. 5

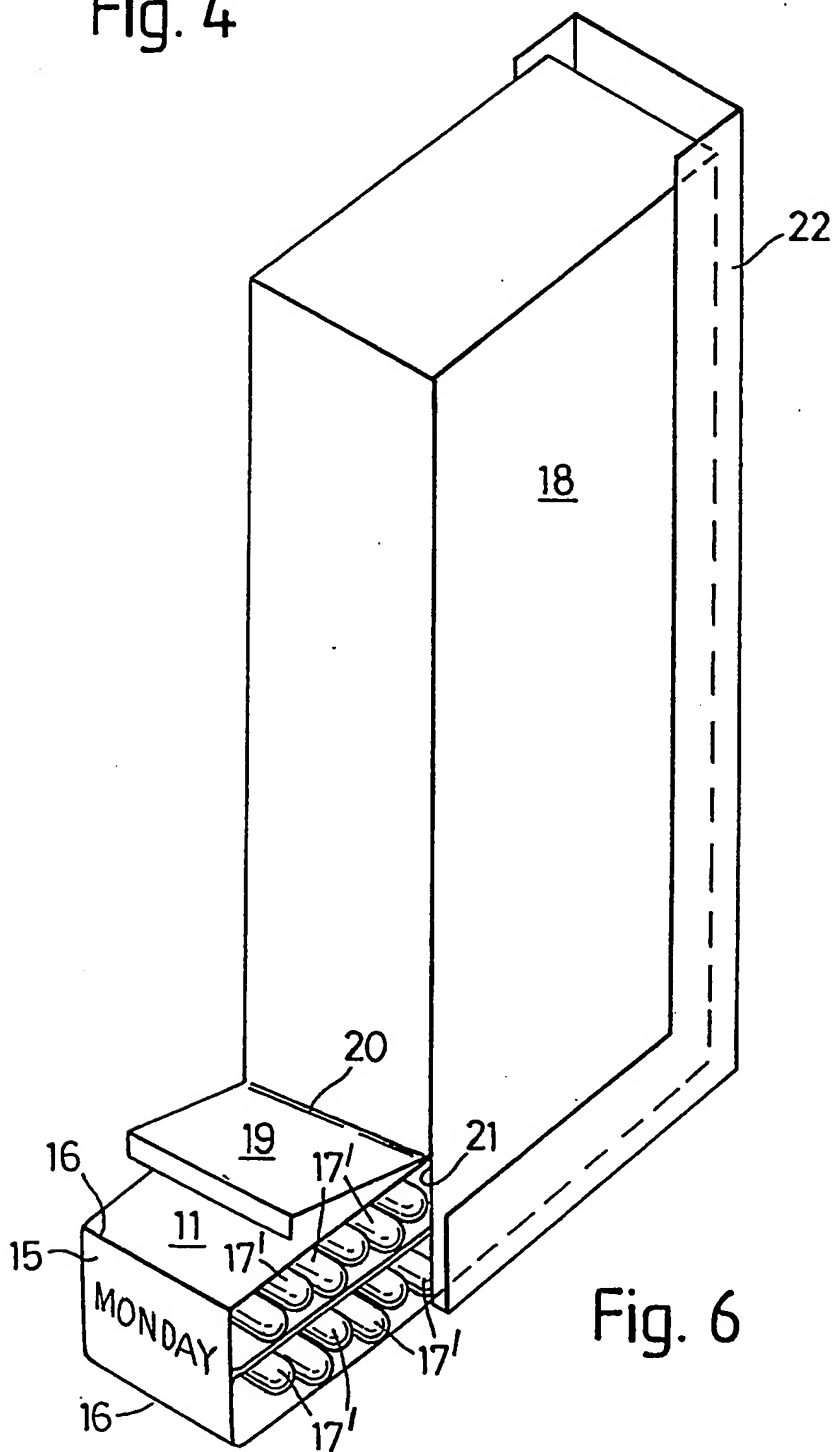


Fig. 6

Improvements in and Relating to Packaging

The invention relates to packaging and more particularly to packaging for pharmaceutical pills, tablets or capsules.

There are presently known, many alternative forms of packaging for pharmaceutical products. U.S. Patent specification No. 3,659,706 discloses a blister packaging arrangement which is foldable into a wallet form but includes separate interengaging parts formed on each blister to retain the package in its folded position and does not provide any arrangement to indicate dosage of the contents. European Patent specification No. 0067176 discloses a pill dispenser with rotatable compartments for dispensing dosages and International Patent publication No. WO85/02828 discloses a blister pack with dates printed on both sides adjacent each blister thereof.

None of these prior arrangements provides a simple and convenient packaging which easily enables a user with bad eyesight to locate a predetermined dosage of pharmaceutical products or which encourages patient's compliance with taking prescribed dosages.

It is an object of the invention to obviate or mitigate these disadvantages.

According to one aspect of the invention there is provided a first blister packaging arrangement comprising at least first and second separate rectangular areas of a support member, each having blisters formed thereon, and a third rectangular area of the support member located between

the first and second areas, with respective fold lines therebetween, the blisters formed on the first area being offset with respect to the blisters formed on the second area and the width of the third area of the support member being such that when the first area is folded about the fold lines to overlies the second area at least part of the sides edges of the blisters on each of the first and second areas interengage to retain such first and second areas removably attached one to the other.

A second blister packaging arrangement may comprise two first packaging arrangements as defined in the next preceding paragraph, having a common support member with the two first areas thereof being joined by a fourth area thereof, with respective fold lines being provided at the fourth area to allow the two folded first packaging arrangements to be folded thereabout to lie one above the other.

At least some of the fold lines may comprise perforations.

Each of said first and second areas may have indicia printed or indicated thereon with information relating to dosage with a single dose being packaged at each first and second area.

A dispensing package may be arranged to accommodate a predetermined number of folded second blister packaging arrangements juxtaposed therein and an aperture forming portion thereof may be sized to allow only a single folded blister packaging arrangement therethrough.

The foregoing and further features of the invention may be more readily understood from the following description of a preferred embodiment thereof, by way of example, with reference to the accompanying drawings, in which:-

Fig 1 is a plan view of a blister packaging arrangement in its open form;

Fig. 2 is a plan view of the arrangement of Fig. 1, partially folded;

Fig. 3 is a side elevational view of the arrangement in Fig. 2;

Figs. 4 and 5 are plan and side elevational views, respectively of the arrangement of Figs. 1 to 3 in its fully folded form, and

Fig. 6 is perspective view of a container and dispenser for the arrangement of Figs. 1 to 5.

Referring now to Fig. 1 of the drawings there is shown a plan view of a blister packaging arrangement for pharmaceutical products which are in the form of cylindrical capsules in this embodiment. The arrangement comprises a generally U-shaped support sheet 10, each arm of which comprises a first area 11 and a second area 12 separated by a third area 13 with respective fold lines 14 interposed therebetween. The two first areas 11 are separated by a fourth area 15 with respective fold lines 16 interposed therebetween. Each of the first and second areas 11 and 12 are formed with four respective blisters 17 and 17' to receive respective capsules.

The blisters 17' on second areas 12 are offset with respect to the blisters 17 on first areas 11 so that when

second areas 12 are folded about fold lines 13 to overlies respective first areas 11, as shown in Figs. 2 and 3 for the right hand portion of the arrangement, the side walls of blisters 17 and 17' interengage to retain areas 11 and 12 in the folded position. With both portions of the arrangement folded with areas 12 overlying areas 11, the two second areas 12 may be folded about fold lines 16 to lie face to face to provide a wallet format as shown in Figs. 4 and 5.

With the arrangement shown the blisters 17 and 17' of areas 11 and 12 contain a single dose to be taken at one time and hence comprise four doses which are intended to be taken in one day. Hence the areas 11 and 12 are each marked with the time the dose is to be taken and area 15 is marked with the actual day although the markings could be additionally or alternatively colour coded. The fold lines 14 and 16 may each be weakened portions or preferably perforated so that the particular area containing the dose to be taken can be removed from the remainder of the arrangement at the required time.

The rear surface of each area 11 and 12 may have a peelable sheet located thereover to allow all capsules for one area to be made accessible at the time they are to be used.

Referring now to Fig. 6 there is shown a carton 18, for containing, for example, seven of the arrangements shown in Figs. 1 to 5 to provide a supply for one week. The carton 18 is provided with an openable flap 19 hinged at fold line 20 to provide an aperture 21 which will allow passage of one packaging arrangement to pass therethrough. The carton 18 is

located in a holder 22 which may be free standing or wall mounted.

Hence there is shown packaging for pharmaceutical products which is economical and can be factory packed with a supply for a relatively long period but can be dispensed in wallet form daily and can be separated easily for each dosage, with each dosage being easily recognised by feel as well as by sight. The arrangement considerably enhances patient compliance with consuming a prescribed dosage over the required periods since the patient need not be confronted with more than a single dose at any one time. This is achieved since the patient can reveal the first dose by removing a backing sheet without opening the arrangement from the fully folded format and this similarly applies to each further dose. The arrangement shown has the further advantage that by interspersing the blisters a smaller overall packaging volume is achieved since most of the airspace associated with blister packaging is eliminated.

Although the embodiment shown is for cylindrical capsules, the arrangement could equally well be used for packaging circular pills or any other solid pharmaceutical form by providing offset blisters and in all instances the blisters are arranged to be oversize with regard to the intended contents, to allow the side walls to be deformed by inter-engagement when folding. A combination of different pill/capsule form could be contained in a single blister. Although the embodiment shown has four discrete areas for accommodating capsules the arrangement could merely have two

such areas or could have six or more such areas by providing additional fourth areas.

Claims

1. A first blister packaging arrangement comprising at least first and second separate rectangular areas of a support member, each having blisters formed thereon, and a third rectangular area of the support member located between the first and second areas, with respective fold lines therebetween, the blisters formed on the first area being offset with respect to the blisters formed on the second area and the width of the third area of the support member being such that when the first area is folded about the fold lines to overlies the second area at least part of the sides edges of the blisters on each of the first and second areas interengage to retain such first and second areas removably attached one to the other.
2. A second blister packaging arrangement comprising two first packaging arrangements as claimed in claim 1, having a common support member with the two first areas thereof being joined by a fourth area thereof, with respective fold lines being provided at the fourth area to allow the two folded first packaging arrangements to be folded thereabout to lie one above the other.
3. A first or second blister packaging arrangement as claimed in claim 1 or claim 2 respectively, wherein at least one of the fold lines comprise perforations.
4. A first blister packaging arrangement as claimed in either of claims 1 or 3, or a second blister packaging arrangement as claimed in claim 2, wherein each of said first and second areas have indicia printed or indicated thereon with information relating to dosage with a single dose being packaged at each first and second area.
5. A dispensing package arranged to accommodate a predetermined number of folded second blister packaging arrangements juxtaposed therein, an aperture forming portion thereof being sized to allow only a single folded second blister packaging arrangement therethrough.
6. A first blister packaging arrangement as described hereinbefore with reference to the accompanying drawings.

7. A second blister packaging arrangement as described hereinbefore with reference to the accompanying drawings.

Examiner's report to the Comptroller under
Section 17 (The Search Report)

9026319.5

Relevant Technical fields

(i) UK CI (Edition K) B8P (PA, PK10)

(ii) Int CI (Edition 5) B65D

Search Examiner

MIKE HENDERSON

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

3 MARCH 1992

Documents considered relevant following a search in respect of claims

1-4, 6, 7

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB A 2224720 MANREX Whole specification relevant	1, 3, 4
X	US 4340141 FISCHER Whole specification relevant	1, 3, 4
X	US 3743084 DOUGLAS Whole specification relevant	1, 3, 4
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Category	Identity of document and relevant passages	Relevant to claim(s)

Categories of documents

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